

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF VIRGINIA  
ALEXANDRIA DIVISION

IN RE APPLICATION OF THE UNITED  
STATES OF AMERICA FOR AN ORDER  
PURSUANT TO 18 U.S.C. § 2703(d)

MISC NO. 10-4 10GJ3703

**ORAL ARGUMENT REQUESTED**

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**MOTION FOR LEAVE TO FILE BRIEF OF AMICI CURIAE IN SUPPORT OF BRIEF  
OF AMICI CURIAE IN SUPPORT OF OBJECTIONS OF REAL PARTIES IN  
INTEREST JACOB APPELBAUM, BIRGITTA JONSDOTTIR AND ROP GONGGRIJP  
TO MARCH 11, 2011 ORDER DENYING MOTION TO VACATE**

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Computer network and Internet technology experts, Steven M. Bellovin, PhD., Matt Blaze, PhD., Jim Gettys, Susan Landau, PhD., Anthony G. Lauck, Peter G. Neuman, PhD., David P. Reed, PhD., Bruce Schneier and Barbara Simons, PhD. (collectively “Amici”), move for leave to file the accompanying brief as *amici curiae* in support of the objections of real parties in interest, Jacob Appelbaum, Birgitta Jonsdottir and Rop Gonggrijp (the “Parties”), to the March 11, 2011 order denying their motion to vacate an order dated December 14, 2010. Amici believe that the positions expressed by the Parties in their objections are consistent with a proper understanding of the way that Internet Protocol Addresses (“IP Addresses”) function, and respectfully ask that Amici’s perspective be considered.

**I. BACKGROUND**

Amici understand that on December 14, 2010 this court entered an order at the request of the government requiring Twitter, Inc. to disclose a variety of information related to the Parties’ private Twitter accounts pursuant to section 2703(d) of the Stored Communications Act, 18 U.S.C. § 2701 *et seq.* (“December 14 Order”). Among the information that the December 14 Order compelled to be turned over was data reflecting the Parties’ IP Addresses, as well as date-and-time of access information. The face of the December 14 Order indicates that the government’s underlying investigation presumably relates, in some way, to the website

WikiLeaks.

On January 26, 2011, the Parties filed a motion to vacate the December 14 Order on First and Fourth Amendment grounds. The government objected on February 7, asserting, among other things, that IP Addresses were analogous to telephone numbers and that the court should not recognize any greater degree of privacy for IP Addresses than it would to telephone numbers. On March 11, 2011, the court denied the Parties' motion, having apparently been persuaded by the government's analogy.

## **II. INTEREST OF AMICI**

Amici are Steven M. Bellovin, PhD., Matt Blaze, PhD., Jim Gettys, Susan Landau, PhD., Anthony G. Lauck, Peter G. Neuman, PhD., David P. Reed, PhD., Bruce Schneier and Barbara Simons, PhD. (collectively "Amici"). Each amicus is an expert in computer network and Internet technologies as well as the security and privacy issues unique to those technologies. An abbreviated summary of each amicus' background and honors, listed in alphabetical order, is as follows:

Steven M. Bellovin, PhD. Dr. Bellovin is a professor of computer science at Columbia University, where he does research on networks, security, and especially why the two do not get along. He joined the faculty in 2005 after many years at Bell Labs and AT&T Labs Research, where he was an AT&T Fellow. He is a member of the National Academy of Engineering and is serving on the Computer Science and Telecommunications Board of the National Academies, the Department of Homeland Security's Science and Technology Advisory Committee, and the Technical Guidelines Development Committee of the Election Assistance Commission. He is the co-author of "Firewalls and Internet Security: Repelling the Wily Hacker," and holds a number patents on cryptographic and network protocols.

Matt Blaze, PhD. Dr. Blaze's research focuses on the architecture and design of secure systems based on cryptographic techniques, analysis of secure systems against practical attack models, and on finding new cryptographic primitives and techniques. This work has led directly to several new cryptographic concepts, including: "Remotely-Keyed Encryption," which allows the use of inexpensive, low-bandwidth secure hardware to protect high-bandwidth communica-

tion and stored data; "Atomic Proxy Cryptography," which allows re-encryption by untrusted third parties; and "Master-Key Encryption," which provides a systematic way to design (and study) ciphers with built-in "back doors."

Jim Gettys. Mr. Gettys is a computer programmer at Alcatel-Lucent Bell Labs, USA. Until January 2009, he was the Vice President of Software at the One Laptop per Child project, working on the software for the OLPC XO-1. He is one of the original developers of the X Window System at MIT and worked on it again with X.Org, where he served on the board of directors. He previously served on the GNOME foundation board of directors. He worked at the World Wide Web Consortium (W3C) and is the editor of the HTTP/1.1 specification in the Internet Engineering Task Force. He also helped to establish the handhelds.org community, from which the development of Linux on handheld devices can be traced.

Susan Landau, PhD. Dr. Landau is a fellow at the Radcliffe Institute for Advanced Study, Harvard University and was previously a Distinguished Engineer at Sun Microsystems. She is the author of "Surveillance or Security? The Risks Posed by New Wiretapping Technologies" and co-author of "Privacy on the Line: The Politics of Wiretapping and Encryption."

Anthony G. Lauck. Mr. Lauck is an independent consultant residing in Warren, Vermont. Previously, he was a Corporate Consulting Engineer and the Technical Director of Networking at Digital Equipment Corporation. His group at Digital developed solutions to a number of problems associated with large computer networks, including naming, routing, congestion control and security. He has contributed to standardizing network protocols since the early 1980's, when he was part of the team that developed the Ethernet standard. He was a member of the Internet Advisory Board (IAB) and the National Science Foundation Network Technical Advisory Group. He holds patents on local area networks, data link protocols, flow and congestion control algorithms, routing protocols, and multi-protocol networking.

Peter G. Neuman, PhD. Dr. Neumann is the Principal Scientist, SRI International Computer Science Laboratory. He also serves as the moderator of the Association for Computing Machinery (ACM) Risks Forum.

David P. Reed, PhD. Dr. Reed has had a distinguished 45-year career in computer systems engineering, as a key participant in the design and implementation of the Internet, personal computing, distributed systems, radio networking, and human centered computing environments. He is known for key early contributions to the architecture of the Internet in the 1970's. In recent years, he has contributed to several areas of public technology policy issues, including opening up the wireless spectrum, opening up the debate about Deep Packet Inspection and modification and preserving the openness of the Internet worldwide.

Bruce Schneier. Internationally renowned security technologist Bruce Schneier has authored eleven books -- including "Beyond Fear and Secrets and Lies" -- as well as hundreds of articles, essays, and academic papers. His influential newsletter "Crypto-Gram," and his blog "Schneier on Security" ([www.schneier.com](http://www.schneier.com)) are read by over a quarter million people. Mr. Schneier is also the Chief Security Technology Officer of BT (formerly British Telecom).

Barbara Simons, PhD. Dr. Simons is Senator Reid's appointee to the Board of Advisors of the U.S. Election Assistance Commission. She served on the President's Export Council's Subcommittee on Encryption and on the Information Technology-Sector of the President's Council on the Year 2000 Conversion. She has testified before both the U.S. and state legislatures and at government sponsored hearings. In 2005 Simons became the first woman to receive the Distinguished Engineering Alumni Award from the College of Engineering of U.C. Berkeley. Simons was President of the Association for Computing Machinery, the nation's oldest and largest educational and scientific society for computing professionals, from July 1998 until June 2000. She is a Fellow of ACM and the American Association for the Advancement of Science, and is retired from IBM Research. She was runner-up in the first election for the North America seat on the Internet Corporation for Assigned Names and Numbers (ICANN) Board.

Amici support the objections of the Parties because Amici believe that when a court seeks to apply a law into an area of rapidly developing technology, it is crucially important that the court correctly and fully understand that technology. Otherwise, the court's ruling could have far-reaching and unintended harmful effects, including effects that might diminish the public's perception of the wisdom and integrity of the judiciary. In this matter, the government has

sought to apply 20th Century technology and 20th Century precedents to 21st Century technology. Specifically, the government has taken the position that IP Addresses are directly analogous to telephone numbers and that the court should simply follow U.S. Supreme Court precedents that found a minimal expectation of privacy with respect to telephone numbers. The Parties, on the other hand, assert that IP Addresses can reveal that the Parties were located in particular private spaces at particular times and that such information entails a reasonable expectation of privacy. As is shown in the accompanying brief, given the technology surrounding IP Addresses and the potential information that can be gleaned from them, the Parties' position that IP Addresses are more closely analogous to cell phone location information than to simple telephone numbers is correct. In addition, the Parties' assertion that this information can be used to track the physical location of users, including into traditionally constitutionally protected spaces, is also correct.

### **III. CONCLUSION**

For the reasons set forth above, Amici respectfully urge the Court to accept the accompanying brief for filing.

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### **CERTIFICATE OF SERVICE**

I hereby certify that on the 31st day of March, 2011, I will electronically file the foregoing with the Clerk of Court using the CM/ECF system, which will then send a notification of such filing (NEF) to the following:

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